

80004

## Cruise Report

Project: Puerto Rico Marine Geology Co-op

Cruise: 80-3 (Eastward E-10-80)

Ship: Research Vessel Eastward, Duke University

Area of Operation: Insular shelf & slope between Puerto Rico and St. Thomas, north of Culebra and south southwest of St. Thomas.

Dates: February 3 thru 10, 1980

Science Party: At sea - Bill Cleary ( University) Chief Scientist  
Kurt Grove (U. S. G. S. San Juan), Arturo Camacho (D. N. R. , San Juan)

Woods Hole Technicians: Al Goodman, Barry Erwin

On shore: John West (U. S. G. S. Corpus Christi), Jose Muniz (D. N. R. , San Juan), Nelson Espinell (D. N. R. San Juan)

Man days: At sea - other 16, U. S. G. S. 24  
On shore - other 24, U. S. G. S. 8

Purpose & Accomplishments: To acquire seismic, bathymetric, and sedimentologic data from the previously unsampled portion of the Puerto Rico insular shelf and slope north of Culebra Island, and provide alternate research goals for the ill-fated Puerto Rico Trench cruise of the R. V. Eastward E-1b & c-80.

The cruise accomplished the retrieval of 62 bucket & shipek grab sediment samples from the insular shelf north of Culebra & south southwest of St. Thomas, 42' short ( 6') gravity cores from slope areas north of Culebra and south of St. Thomas, 900 nautical miles of 3.5 KHz seismic record of the slope and shelf, 317 nautical miles of 20 cu' in airgun record in the slope north of Culebra and 41 nautical miles of 20 cu. in. airgun record on the slope south west of St. Thomas. All airgun data recorded on magnetic tape.

Equipment: Shipek sampler, 20 cu. in. airgun and spares, EPC recorder and spares, kronhite filters, amplifiers, TEAC mag. recorder, and amp. , Mini-ranger navigation system, satellite navigation, and Loran C navigation both with TI printers, VHF radios, linking R. V. Eastward & shore stations.

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Comments: Data will be jointly worked up by Bill Cleary, Orrin Pilkey,  
and U. S. G. S. San Juan personnel.

Approved - distribute  
JT

U. S. G. S.  
San Juan, Puerto Rico  
Marine Geology Project